AMENDMENTS TO THE SPECIFICATION

Please insert the following paragraph after the title:

CROSS-REFERENCE TO RELATED APPLICATION

This Application is a 371 of PCT/AU2003/000778, filed June 20, 2003; the disclosure of which is incorporated herein by reference.

Page 6, last paragraph, (spanning pages 6 and 7), delete in its entirety, and replace with the following amended paragraph:

The cover 10 also includes engaging surfaces in the form of wings 26. The wings 26 are adapted to engage ramps 28 of a tray 21 shown in Figure 7, to thereby lift the cover clear of the surface of the slide 1. An example of the wings lifting the cover free is shown more clearly in Figure 18. The cover 10 may be controlled by an arm (not shown) moving the locating means 16. The cover 10 may be placed in a number of positions over the slide, exemplified by the positions of the cover relative to the slide shown in Figure 19. In Figure 19(a), the cover 10 is in an open position relative to the slide 1, as the sample is exposed and open. Figure 19 (b) shows the cover in a partially closed position, and Figure 19 (c) shows the cover in a fully closed position, where the sample is completely covered by the cover and is therefore wholly contained within the reaction chamber 24. The reaction chamber formed by the cover and cavity 18, as shown in Figure 5, extends over most of the slide 1. However it is possible that the sample may be placed more towards the end of the slide distal from the bar code 4, and therefore a smaller reaction chamber 24 is required. Reducing the size of the reaction chamber 24 reduces the amount of fluid required to fill the chamber, which can be important where expensive or scarce fluids are used. It is possible to form a smaller reaction chamber with the cover 10, by only covering a ~~porion~~ portion of the slide 1 with the cover 10. This position is shown in Figure ~~18~~ 19 (b).

Page 11, last paragraph, (spanning pages 11 and 12), delete in its entirety, and replace with the following amended paragraph:

The cavityed face 19, as shown in Figure 2, may have different surface properties to the rest of the cover. It has been found to be desirable to have similar material properties for the upper surface of the slide 2 and the cavity 18. In one example, it is possible to coat the surface of the cavity with a material 77 (shown in Figure 6), such as silicon dioxide. This coating may be approximately 110 nm thick. The coating provides a surface with material properties similar to that of a glass slide. It has also been found that there are benefits in applying a thin layer 79 (for example 0.5-6nm) of Chromium Oxide (Cr203) to the cavity before applying the silicon dioxide layer. This application of an intermediate layer between the silicon dioxide and plastic provides better adhesion and better thermal expansion properties for the cavity. Further, coatings in general may be used to improve the flatness of the cavity (which reduce nucleation sites and therefore bubble formation at high temperatures). The coatings may be used to modify the capillary flow characteristics of the fluid within the reaction chamber, create an impermeable barrier for gas or liquid between the cover and fluid in the reaction chamber, or provide a chemically inert surface.

Page 11, last paragraph, delete in its entirety, and replace with the following amended paragraph:

Experiments have demonstrated that a chamfer at the end of the cavity reliably allows the bubbles to escape to atmosphere. The existing reservoir 17 can be redesigned as illustrated in Figure 20, where a modified cover 60, similar to that shown in Figure 14, is shown with a chamfer 61 to assist in releasing bubbles, without affecting the even fluid flow through the ~~cavity~~

~~18.~~ cavity 18. The chamfer forms a first angled section 62 at about 60° relative to the cavity and slide surface.